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ABSTRACT

Designed for reluctant readers in vocational high school, this selection of readings emphasizes general information about the automotive trade. Articles have been selected from a variety of auto magazines and trade journals. Each article is followed by an assortment of exercises designed to enable the student to further develop vocabulary and comprehension skills. Titles of some of the articles follow: "What Are Autos Made Of?," "Where Have All the Hot Cars Gone?" "Automatic Transmissions: Just What the Wankel Needed," "Great Moments in Motoring History," and "Is There a Three-Wheeler in Your Future?" (SH)

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State of New Jersey
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# READINGS IN THE AUTOMOTIVE TRADE

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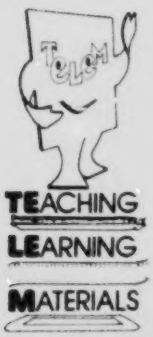


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## To The Teacher

The classrooms of today's high schools are filled with reluctant readers. They are usually reluctant to read for one of two reasons: either their reading materials are too difficult, or these same materials are simply not interesting. Nowadays, the trend in education is even more toward meeting the needs of the students, not only in the skill area but also in their areas of interest – the means to the end. In order for students to succeed in a particular learning situation, their interest in that area must be expanded.

This text is designed for the reluctant readers in the vocational high school. Where do you go to find their interests? Straight to the shop areas of their choice. You might say, then, that the interest is built within the school's structure. Let the reading materials revolve around the student's particular shop.

In this text, the emphasis is placed upon the automotive trade in general. Articles have been selected from a variety of auto magazines and trade journals. They are the motivational tools used to develop a reading habit for the reluctant reader in the vocational high school. Each article is followed by an assortment of exercises enabling the student to further develop vocabulary and comprehension skills.

The text is not a mass of exercises trying to program the student. It is flexible. It may be a very useful tool to which the teacher may refer for sample lessons for an entire class exercise, or it may be used individually when the need arises. In the students' hands it may serve as an individual workbook in which they can work at their own rate, hopefully deriving enjoyment from the reading. The teacher should also encourage students to update the text with more recent articles. The students might even enjoy developing their own exercises for one another.

## Drive Slow, Man Chortling (1)*

by Ogden Nash

Gangway, everybody, hold your hats,
Curb your dogs and leash your cats,
Embrace your young in parental clasp,
Breathe in deep and prepare to gasp,
Feel your pulse grow rapid and joggly,
Open your eyes and goggle agogly,
Hitch your wonderment to a star –
Here comes me in a brand-new car.

Behold this gem of automobiles!
At either end it has two wheels.
What's more, you'll notice as you draw near it,
Another wheel inside it, to steer it.
Oh my, how I that car admires!
The outside wheels have rubber tires.
Oh bless the day that I was born!
The inside wheel supports the horn.

My natal day I will not curse.
I've three speeds forward and one reverse.
The backward speed I truly adore,
Yet love the forward three times more.

Upon this car I am a doter;
Golly, it's even got a motor!
Nothing so much a car improves
As when you start it up, it moves.

Pour forth, my soul, in joyous hymns;
The wiper wipes, the dimmer dims,
The body on loving springs is bolstered,
And wherever you sit, it's all upholstered.
The luggage compartment is so commodious
That sleeping in it would not be odious.
Doubt if you must, but I know I'm right, there;
As a matter of fact, I spent last night there.

* Numbers in parentheses refer to Reference List, beginning on page 73.

Oh, how I pity Father Divine,
Who hasn't a new car just like mine.
Kings and emperors make mistakes
Riding around in inferior makes.
Gangway, you motoring proletariat,
Here come me in a brand-new chariot,
And I'll sell you my thoughts for one half of tuppence:
A lot of road hogs are going to get their come – uppance.

## To The Student

As you read the following articles, follow these directions:

1. Make a list of all the words that relate to the automobile industry.

2. Make a list of all the words that you either can't pronounce, or don't know the meaning of.
   Learn them.

3. Make up two or three questions to ask another student to check his reading.

4. Write a short summary of the article. Use one or two sentences.

## What Are Autos Made Of (2)

**Learn These Words:**

*Aluminum* – a silver-white, very light metal that resists tarnish.

*Durable* – lasting a long time; not soon injured or worn out.

*Molded* – formed, shaped.

*Reinforcement* – something that strengthens with new force or materials.

Auto manufacturers are stepping up their uses of different materials in the production of cars and trucks. Steel remains the chief material, but aluminum, plastic, and rubber have new and interesting uses.

Among these may be rubber bumpers, plastic shields and front quarters, and fiberglass reinforced plastic and aluminum for the body.

Rubber bumpers have been receiving most of the spotlight for the newer models. The material, known as EPDM rubber, is reported to absorb impacts without denting in low-speed collisions. It is also said to hold paint well and to resist flaking caused by high temperatures.

Some auto builders believe that the entire front ends of passenger cars will be rubber, molded in one unit. That would include the grill, fender, and headlights as well as the bumper.

Next you'll be seeing aluminum body panels. Aluminum may be used to make deck lids, hoods, and bumper reinforcements. But the problem of putting the whole thing together must be worked out before aluminum can be used.

Meanwhile, one truck and bus company is using fiberglass reinforced plastic in its buses. For example, the ceiling of the bus is one long piece of this material.

The new developments in materials have made cars lighter, easier to maintain, and more durable.

**About the Article**

1. What are the advantages of rubber bumpers?

2. What other materials are being used in the production of cars and trucks?

**About Words**

Use each of the vocabulary words (the words defined at the beginning of the article) in two sentences.

**Suggestion:**

What are some other uses of the materials mentioned in the article?

### The Hick and the Big City Car Salesman (3)

The hick was a born bargainer and the car salesman was having plenty of trouble selling him. Finally, he thought a demonstration of the car's performance might help. Explaining how it worked, he said, "And now I'll throw in the *clutch*." "I'll take 'er then," said the hick. "I knew if I held off long enough ye'd throw in somethin'."

What sold the hick?

## Where Have All The Hot Cars Gone?

**Learn These Words:**

*Acceleration* – an increase in speed.

*Camshaft* – the shaft in the engine that has a series of cams (moving parts) for operating another part.

*Carburetor* – a device for mixing and controlling the air and fuel supplied to an engine.

*Clutch* – a device in a machine for connecting or disconnecting the engine or motor that makes it go.

*Exhaust* – the pipe from which burned gases are released.

*Option* – an extra feature on a car; for example, radio, vinyl roof, etc.

They were called supercars and with good reason. In the Sixties, these cars combined high horsepower engines with some of the most exciting styling to come out of Detroit. Slip them into gear, pop the clutch, and they could pin you to the seat and hold you there with greater acceleration than race cars of just a few years before.

But it's mostly gone now, that never-never land of hot camshafts, dual carburetors, rambling exhausts, and mind-blowing acceleration. While in 1965, a little 289-cubic-inch engine Shelby GT 350 Mustang needed only 6.5 seconds to get to 60 mph, a massive 455-cubic-inch 1973 Pontiac Trans-Am Firebird needed only 6.7 seconds.

So what happened to these rare American automobiles?

Three events helped to remove the supercars from the road: insurance rate hikes, government regulations, and an increase in car prices. Insurance companies began to charge more money on engines over 400 horsepower and 4-speed transmissions. While this

made the supercars too expensive to own, government regulations on pollution made the cars less powerful and less desirable at the same time. And with all this going on, the car makers in Detroit loaded the supercars with very expensive options.

How can we ever forget these supercars: the Pontiac GTO (the supercar grandfather), Oldsmobile's 4-4-2, Buick GS, Camaro Z/28, Corvette, Shelby GT, Plymouth Road Runner, and the Dodge Charger, just to name a few. They were part of a most exciting automotive era. Why exciting? Because even though they would stumble and foul their spark plugs in traffic, they were a lot of fun. Taking the car to the local drag strip on Wednesday or Friday night was enough to keep a guy's heart going for a week at a time.

Where have they all gone? Many of them have gone to used car lots, and that's where you'll have to go if you want a muscle car with real muscles these days.

**About the Article**

Answer *True* or *False*

_____ 1. Supercars were popular in the Fifties.

_____ 2. The Shelby GT 350 Mustang needed only 6.5 seconds to get to 60 mph.

_____ 3. Government regulations on pollution made cars more powerful.

_____ 4. Road Runner, Charger, and Corvair were supercars.

_____ 5. Doctors perform options.

**About Words**

The word *clutch* has other meanings besides the one given at the beginning of this article.

For example:

| Word | Meaning | Sentence Use |
|---|---|---|
| clutch | a tight situation | He always comes through in the *clutch*. |
| clutch | to hold tightly | You must *clutch* the pliers to loosen the nut. |

The word *exhaust* is defined at the beginning of the lesson.
In your dictionary, find two more meanings for the word *exhaust* and use each in a sentence.

| Word | Meaning | Sentence Use |
|---|---|---|
| exhaust | | |
| exhaust | | |

**Words Paint a Picture**

Describe in your own words the meaning of the term "muscle car" in the sentence: Many of them have gone to used car lots, and that's where you'll have to go if you want a muscle car with real muscles these days."

**Words for Your Notebook**

In the beginning of this article you were given several words related to the automotive field. They were: clutch, acceleration, camshaft, carburetor, and exhaust. Below are some more words to add to this list. Follow the directions and place these words in your notebook.

1. Pronounce each word correctly (dividing the word into syllables may help)
2. Spell each word correctly.
3. Define each word.

4. Use each word in a good sentence.

| | |
|---|---|
| battery | bore |
| bearing | condenser |
| | distributor |

**Suggestions**

1. Discuss the government regulations on pollution with the class.

2. Collect pictures of the supercars of the Sixties and make a scrapbook to show the class.

3. Draw your own version of a muscle car.

## Behind the Wheel Of The Batmobile (5)

**Learn These Words**

*Atomic* – having to do with atoms.

*Device* – a mechanical invention used for a special purpose.

*Fantastic* – very odd or queer; wild and strange in shape.

*Gadget* – a small mechanical device.

*Instrument* – thing with or by which something is done.

In Hollywood's world of make-believe, the fantastic is a part of everyday life. So it was with the Batmobile, the car that took television's Dynamic Duo, Batman and Robin, on their crime-fighting drives through Gotham City.

"Holy hot rod!" I said to myself. I had my chance to get behind the wheel of the very machine that helped to beat some of the worst baddies in the history of law-breaking. Do you know what it was like to drive one of the world's most advanced automobiles? It did the very things Batman said it did. Only one bit of bad news though – it wasn't really atomic powered. It had plenty of fascinating features, however.

One gadget was the Anti-Theft Activator. If a stranger tried to start the Batmobile, the car would shoot flares from its three rocket tubes. Another instrument was the Detect-a-Scope, a round screen mounted on the dash in front of the passenger. Its purpose was to track either Batman or Robin if one of them left the car or was kidnapped. There was the Bat-Ray Projector, a simple device that flashed the Bat symbol on the night sky as a signal to the police of Gotham City. And how could you forget the twin laser-beam lights and the deadly Slasher Blade.

The only thing the Batmobile didn't have was a roof to protect the duo from the weather. But at the speed that it traveled, who felt the rain anyway?

What happened to that car that was painted Bat-Fuzz Black, trimmed with fluorescent red? Where is it now?

**About the Article**

1. Tell what each of the following instruments did: Anti-theft Activator; Detect-o-Scope; Bat-Ray Projector.

2. Why did the author refer to the Batmobile as one of the most advanced automobiles?

**About Words**

Look at the word *device* in the sentence:

"A drill is a *device* used to make holes."

It means a mechanical invention used for a special purpose – in this case, to make holes.

Now look at the word *devise* in this sentence:

"They tried to *devise* a plan for the future."

*Devise* means to think out or to plan.
Do not confuse the words *device* and *devise*.

Look up the meanings of the following words. See how they are different. Use each word correctly in a sentence.

| Word | Meaning | Sentence Use |
|---|---|---|
| advice | | |
| advise | | |

Can you think of other words that are almost alike and that might easily be confused?

**Words Paint a Picture**

This article is filled with descriptive terms and expressions that you don't hear everyday: Dynamic Duo, Holy hot rod!, worst baddies, etc. Can you find any others?

**Suggestions**

1. Look through old magazines for pictures or articles on the Batmobile.

2. Do you think any of the Batmobile's gadgets could be adapted for practical use?

## A New Three-Beam Headlight (6)

**Learn These Words**

*Filament* – the wire that gives off light in an electric light bulb.

*Glare* – strong, bright light; shine so brightly as to hurt the eyes.

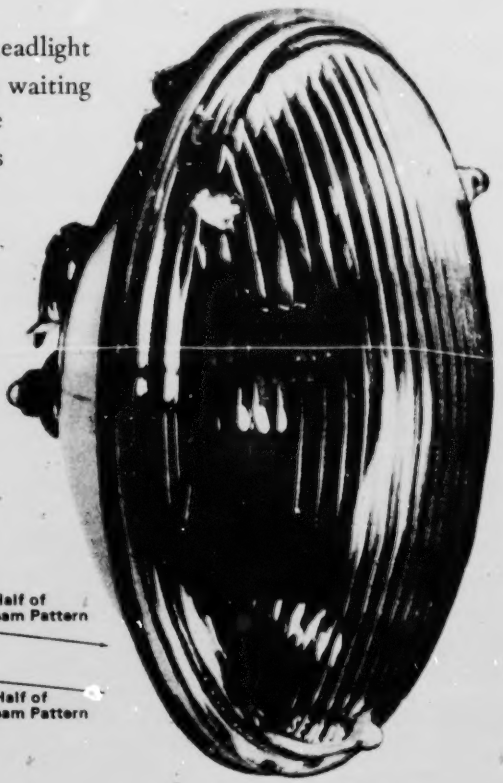
*Hazardous* – dangerous; risky.

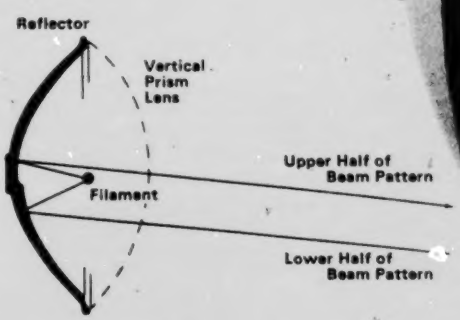
*Intensity* – great strength; extreme degree.

*React* – act back; have an effect on the one that is acting.

Drivers know from thousands of turnpike or freeway miles that two-beam headlights are all wrong. On low beam, you don't have enough light intensity to allow you to see far enough to drive safely up to the speed limit. High beam causes hazardous glare for oncoming traffic.

Westinghouse has developed a three-beam headlight with a middle beam – just what drivers have been waiting for. It's used in a normal four-lamp setup. The outer lamps contain double filament 50-watt lamps giving either a high or low beam. The inside-right lamp has a 60-watt high beam only; the inside-left lamp has the new 50-watt middle beam. When the middle beam is used, the outside lamps are on low beam. The result is a good close-up view of the highway and a sharp high-intensity beam aimed slightly to the right. The three-beam headlights are devised for turnpikes, but





also provide 50 percent better beam selection in all kinds of driving.

The industry hasn't had much time to react to it, but we think it should be made legal, as it is a safety advance. The industry will provide the best headlamps the law will allow.

**About the Article**

1. What does the author mean by the term "hazardous glare?"

2. Who developed the three-beam headlight system?

3. How is the three-beam system different from the older headlight system?

**About Words**

*Intensity* is a form of the word *intense*, which means very strong or very great.

For several days after the accident, Ralph suffered from an *intense* pain in his back.

Look at these other forms of the word *intense* in the following sentences:

1. The teacher became *intensely* angry at the student's conduct.

2. You can *intensify* the pressure by adding more weight.

3. After an *intensive* look at the engine, the mechanic found the problem.

Give the meanings of the following words as they were used in the above sentences:

1. **intensely** _____

2. **intensify** _____

3. **intensive** _____

Use each of the above words in a sentence of your own:

1.

2.

3.

**More Words for Your Notebook**

Follow the directions as outlined on page 9.

| | | |
|---|---|---|
| alignment | block | combustion |
| axle | chassis | |

**Suggestion**

Discuss the term *standard equipment* as it is used in the auto field. What features are considered standard equipment on most cars today?

## Routine Service (7)

The motorist had his gasoline and now was patiently enduring the filling station man's service routine.

"Check the oil, sir?"

"No, it's all right."

"Water in the radiator?"

"No, thanks."

"Check your battery?"

"It's in good shape."

The attendant scratched his head and inquired, "Well, anything else at all, sir?"

The weary motorist sighed, "You might stick out your tongue so I can seal this letter."

## The Tire Pressure Gauge (8)

**Learn These Words**

*Accumulated* – piled up.

*Accurate* – without a mistake; precise; exact.

*Dangerous* – not safe; risky.

*Equipment* – what a person brings with him; gear.

*Gauge* – a tool for measuring.

*Inflated* – filled with air or gas.

*Manual* – a small book that explains how to use something.

*Tragic* – very sad.

*Unnecessary* – not needed.

*Valve* – a movable part that controls the flow of a liquid, gas, etc. through a pipe by opening and closing the passage.

At last, school is out and summer vacation has arrived. You've just packed suitcases, camping equipment and other gear in the family car. Your father's first stop is the gas station down the road. In addition to a tank of high test, he wants some extra tire pressure for the heavy load. The car manual tells your father that the front tires get 26 psi and the rear tires get 32 psi. You get out of the car and set the air pump at the required level. After the last "ting-ting" from the pump, the tires are inflated.

Now you're ready for the road, right? Maybe not. Your tire pressure could be dangerously off. National Bureau of Standards tests indicate that about 50 percent of gas station pumps are three psi off. Because of this, your father may have added unnecessary wear to the car's tires. Your vacation could begin on the wrong foot with a tire blowout which could cause a tragic accident.

One of the first things to remember is that tire pressure should be checked when the tires are "cold" – after they have been resting for at least three hours or have been driven slowly for less than a mile. Don't take any air out of tires that have been warmed up and show high pressure. You can expect about three psi above the recommended cold-tire pressure after driving under 35 mph for a time. After driving at high speeds, the reading will be about five psi higher.

Most tires lose about a pound of pressure for every ten degrees the temperature drops. Tires should be checked at least twice a month during normal driving conditions. Always check before a long trip and when the weather turns cold after a hot spell.

If a little dirt has accumulated over the valve, release some air to clean it out. Push the gauge over the tire valve, but don't jam it on. To make sure the tires are getting accurate pressure, see that no air is leaking. Finally, don't read the gauge at an angle, and always re-check to be sure it was right the first time.

Now, before your next family vacation begins, show them what you know. Check the tire pressure with an accurate gauge. This can add mileage to the life of the tires and make family driving safer.

**About the Article**

1. What have government tests revealed about gas station air pumps?

2. If your father has added too much or too little air pressure to his car's tires, what could happen?

3. What does the term "recommended cold-tire pressure" mean?

4. How much pressure does a tire lose when the temperature drops ten degrees?

5. When should tires be checked?

**About Words**

As we saw in an earlier lesson with the word *clutch*, a word can have more than one correct meaning. Check your dictionary for other meanings of the words *manual* and *pound*. Use each of the words in sentences to show their different meanings.

**More Words For Your Notebook**

| | |
|---|---|
| compression | fender |
| cylinder | flooding |
| | flywheel |

**Suggestion**

Bring in an accurate tire pressure gauge and demonstrate how to use it properly.

## Irritated (9)

The motorist had been working on his broken-down old car while a farmer stood watching him.

"Well, what're you looking at?" snapped the irritated motorist. "Is this the first automobile you ever saw?"

"No, I don't think so," replied the farmer dryly, "but it sure looks a lot like it."

**Learn These Words**

*Crankshaft* – a shaft turning or turned by a crank; the main shaft of an engine.

*Filter* – a device for straining out substances from a liquid or gas.

*Hydraulic* – operated by water.

*Impression* – effect something has on a person; idea.

*Intake* – place where air, gas, water, etc. enters a channel, pipe, or other narrow opening.

*Internal* – inner; on the inside.

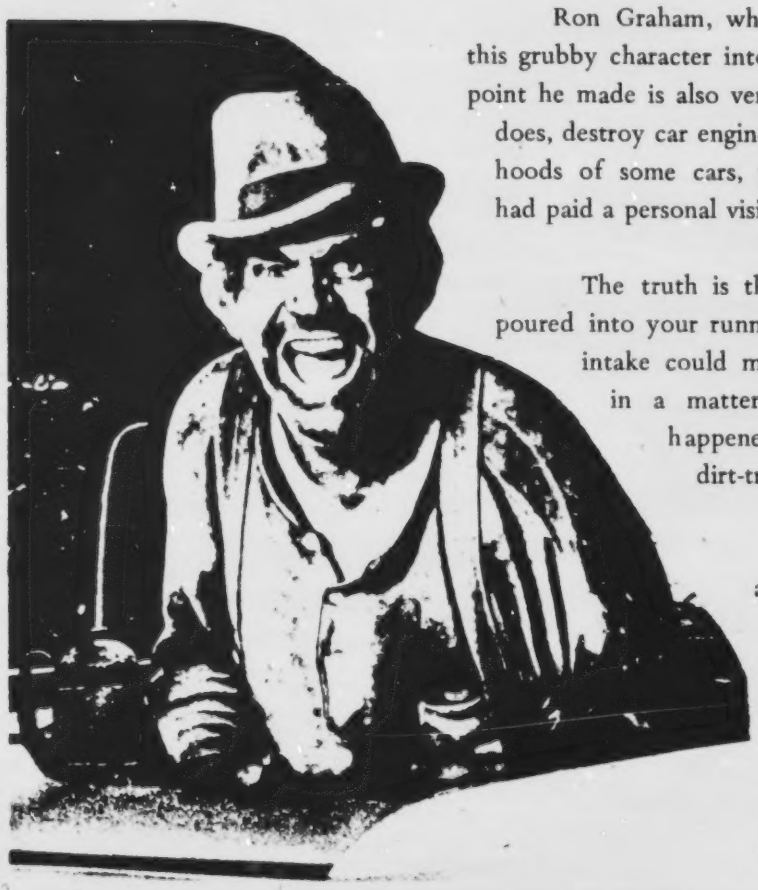
*Install* – put in place.

*Overhaul* – examine to make any repairs or changes that are needed.

*Pistons* – in an engine, a cylinder-like part that moves up and down by some force.

*Sludge* – soft mud; slush.

Mr. Dirt made a big, messy impression as he darted across the TV screen pushing Mobil's detergent gasoline.



Ron Graham, who played the part, turned this grubby character into a whole new career. The point he made is also very important. Dirt can, and does, destroy car engines. After looking under the hoods of some cars, you'd think that Mr. Dirt had paid a personal visit.

The truth is that even a cupful of sand poured into your running engine through the air intake could make an overhaul necessary in a matter of hours. This is what happened to engines used in dirt-track racing cars.

To give your engine a longer life, car builders install many gadgets to protect against dirt, dust, sludge, and grime. They have to put in these gadgets because the newer engines can't handle dirt the way older engines could and did.

Some of the parts in the newer engines that easily collect dirt are the crankshaft workings, pistons and cylinders, valves and valve train, and hydraulic lifters. The fuel system that supplies the engine picks up dirt easily.

The engine's internal working parts collect so much dirt that the manufacturer installs several parts for protection: oil filter, air filter, and two gasoline filters. Checking and replacing these parts and cleaning the engine compartment when needed are the best ways to keep the car in good running condition and avoid major repairs. Many owners who did not do these things with their cars have left them in the junkyard. Mr. Dirt got them.

**About the Article**

1. Who played the part of Mr. Dirt in the TV commercials?

2. What gasoline company did Mr. Dirt represent?

3. What usually happened to engines used in dirt-track racing cars?

4. What are two ways to keep a car in good running condition?

5. What was the main point that Mr. Dirt tried to make?

**About Words**

In previous lessons, we saw that some words have more than one meaning. The word *impression* found in this article can mean "an idea a person is left with." What do you think *impression* means in the following sentence:

After changing the car's oil, the mechanic left an *impression* of his hand on the hood of the customer's car.

_____

What smaller word can you find in *impression*? _____

What does this new word mean? _____

Use it in a sentence. _____

_____

**Prefixes**

The words ***intake*** and ***install*** have something in common. They both begin with the syllable *in*, meaning *in* or *into*. A syllable or word placed before a word to form another word is called a *prefix*. For example:

**intake** (in + take) means to take in.

**install** (in + stall) means to put in place.

But the prefix *in* can also mean *not* as in the words:

**incomplete** (in + complete) means not complete.

**insane** (in + sane) means not sane.

Give the meaning of the following words.

1. indefinite _____
2. incapable _____
3. inadequate _____
4. income _____
5. independent _____
6. inexperienced _____
7. input _____
8. inhuman _____

**Suggestions**

1. Show the class the different types of filters found in a car.

2. Compile a list of some of the gadgets car manufacturers install in their automobiles to protect the car against dirt. How do they work? Bring in models to show the class.

## Transcontinental (11)

The little girl had been pestering her mother with questions. "What's 'transcontinental' mean, Mom?" she asked.

"It means across the continent," replied the vexed mother.

"Does 'trans-' always mean 'cross', Mom?" persisted the girl.

"Yes, yes!" cried mother. "Now if you ask me anything else I'll send you to bed."

The child was quiet for a moment, but after a while ventured, "Then, I guess 'transparent' means a cross parent."

## Automatic Transmissions: Just What The Wankel Needed (12)

**Learn These Words**

*Characteristic* – a special feature that makes one thing different from another.

*Rev* – revolution of an engine or motor.

*Rotary* – turning like a top or a wheel; having parts that rotate.

*Tendency* – a natural way to move or act; leaning.

*Throttle* – valve regulating the flow of steam, gas, etc. to an engine.

*Torque* – force causing rotation.

*Transmission* – the part of an automobile that sends power from the engine to the rear axle.

Mazda's JATCO is the first automatic transmission ever offered with a rotary engine, and it works wonders. One of the characteristics of the Mazda rotary engine is poor low-end torque. A good driver gets around that by downshifting to keep his revs up near torque curve. But that means a lot of shifting. Many drivers just refuse to downshift – then complain of poor pickup.

The automatic transmission takes care of that by insuring downshifts to give the needed power. The car that was tested took 13 seconds for the 0–60 mph run, and its 13.5 seconds for the 25–70 mph test puts it among the faster cars on the road today.

A manual transmission Mazda shows a tendency to backfire if you suddenly close the throttle and let the car coast. How can an automatic transmission help? By smoothing the change from driving to coasting.

The automatic/rotary engine package makes for pleasant driving, especially in city traffic. Upshifts are quick and positive; downshifts are so smooth you hardly notice. But it responds to acceleration with a real kick in the pants. The automatic transmission is just what the Wankel needed.

**About the Article**

1. What is one disadvantage of the Mazda Rotary engine?

2. How does the automatic transmission take care of pickup?

3. What does the manual transmission Mazda have a tendency to do?

4. How does the automatic/rotary engine package make for pleasant driving?

About Words

What does the word *transmission* mean in the following sentences:

1. Mosquitoes are the only means of *transmission* of malaria.

2. As soon as we resume radio contact, we will receive a *transmission* of our new orders.

Transmission begins with the prefix *trans*, meaning over, across, or through. The word *transmission* simply means a sending *over* or passing *through*. Give the meanings of the following words:

1. transoceanic _____

2. transcontinental _____

3. transplant _____

4. transport _____

5. transatlantic _____

**Words Paint a Picture**

What does the author mean by: "It responds to acceleration with a real *kick in the pants*?"

Think of some other expressions which could be used to express the same idea.

**Word Play**

1. If your father belongs to a *Rotary* Club, does that mean that he spins like a top? No, of course not. But what does it mean?

2. The ancient Britons and Gauls wore *torques*. What were they wearing?

**Suggestion**

1. Inform the class about the Wankel engine and how it is different from the standard automobile engine.

2. Explain the differences between an automatic transmission and a manual transmission.

## The Gasless Way To Go (13)

**Learn These Words**

*Conveniences* – comforts; advantages; things that save trouble or work.

*Fuel* – things that can be burned to make a fire; coal, oil, and wood are fuels.

*Similar* – much the same; alike.

*Vehicle* – a carriage, cart, wagon, automobile, sled, or any other transportation used on land.

Can you really beat the fuel shortage? Well, if you're willing to trade leg power for long waits at the gas pumps, you may be able to. How about a vehicle with no engine, no fuel, and no tuneups or oil changes? It's the pedal car, the grownup model of the little toy midgets your parents used to pedal up and down the sidewalk as kids.

The modern pedal cars are smartly styled, fun to drive, and offer such conveniences as bucket seats for two, dual pedal drives so both passenger and driver can pump, multispeed transmissions, storage space for packages, and optional tops to keep out wind, rain, and sun. They could be great for short trips or around town shopping.

What disadvantages do they have? Well, for one thing, they're low speed. The average speed is 8–15 mph. They are also light, weighing only about 100 pounds.

Most states permit the use of pedal cars on local roads, but not on highways. Do they make sense and should you invest in one? It's still too early to tell. They were made

for use around parks, resorts, country clubs, college campuses, and other similar areas. In these areas, they can provide pleasure and healthful exercise; as a way of transportation, they have a long way to go before they'll replace the automobile, gas or no gas. But if you can't wait, better try before you buy.

**About the Article**

1. Why are pedal cars not permitted on highways?

2. What are some of the conveniences pedal cars offer?

3. Where are pedal cars designed to be used?

**About Words**

Can you find a smaller word in *multispeed*? You're correct if you said *speed*. That just leaves *multi*, a prefix that means *many*. So the term "multispeed transmission" really means a transmission with many speeds.

Give the meanings of the following words with the prefix *multi*. (Use the dictionary if necessary.)

1. multicellular _____

2. multicolored _____

3. multiform _____

4. multilateral _____

5. multimillionaire _____

**Suggestions**

1. Discuss some of the practical uses of the pedal car.

2. Suggest to the class various ways to conserve fuel.

3. How would you maintain a pedal car compared to the average automobile?

## In Shape (14)

A tourist entered the village general store and inquired of the proprietor, "Do you happen to have anything in the shape of automobile tires?"

"Yep, quite a few things," he was told. "We've got life preservers, invalid cushions, funeral wreaths, doughnuts, an' such like."

**Learn These Words**

*Alternative* – choice between two or more things.

*Benefit* – advantage; something which is for the good of a person or thing.

*Confirmed* – made positive, proved.

*Estimate* – statement of what certain work will cost.

*Forecast* – a prediction; a planning ahead.

*Maintenance* – keeping in good condition.

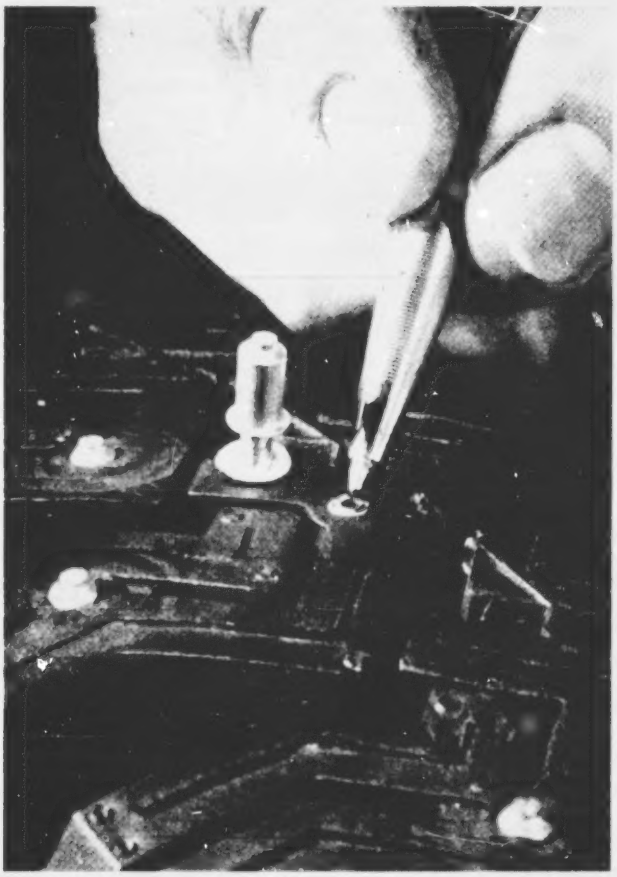
*Restricted* – kept within certain limits; confined.

*Suitable* – right for; proper; fitting.

*Tread* – part of a wheel or tire that touches the ground.

*Vital* – very important.

How serious is the trouble with studded tires? Estimates made in Michigan say the use of studded tires will add 26 million dollars per year to road maintenance costs. That state has restricted the use of studs to times when snow and ice are part of the weather forecast. Is there an alternative?



Studded tires are great for winter driving safety, but they can cause serious damage to roads. During winter driving they make for shorter stops, faster cornering, and less risk of getting stuck or sliding off the road. A $60,000 study by the Cornell Aeronautical Laboratory confirmed the safety benefits of studs.

Now there's a new stud that is claimed to be easier on road surfaces. It only comes out during snow and ice and goes back in when roads are hard and dry. That means less road damage and better braking on dry roads.

Here are two vital and sometimes overlooked facts about studded tires:

1. Only snow-tread tires are suitable for studding.

2. Radial-ply tires are twice as suitable for studding as bias-ply tires.

Remember: Use the right studs in the right tire at the right time.

**About the Article**

Underline the correct answer.

1. Which state has restricted the use of studs?

a. Missouri b. Michigan c. Montana

2. During winter driving, studs help in making

a. slower cornering b. snow and ice melt c. shorter stops

3. The new stud only comes out when the roads are

a. hard and dry b. slippery and wet c. covered with snow and ice.

4. Studs are only suitable for

a. snow-tread tires b. radial-ply tires c. bias-ply tires.

5. Another word that means the same as *vital* is

a. polite b. necessary c. mistake

**About Words**

*Suitable* has two parts:

*suit*, meaning to fit, to be right.
*able*, meaning that can be; able to; able to be.

In an earlier lesson, you learned about the *prefix*. Now it is time to hear about the *suffix*. A *suffix* is an addition made at the end of a word to form another word.

For example:

**suitable** (suit + able) means that can fit or be right for.

Replace one of the words in italics with *suitable*.

"Well, Mom, I think I'm all ready for the wedding," said the young woman happily.

"Just try on your wedding gown one more time to see if the *fit* is right," replied her mother, "and by the way, have you finished shopping for clothes that are *fit* for your honeymoon at that fashionable resort?"

Here are some more words with the suffix *able*. Can you figure out their meanings?

1. reachable _____
2. comfortable _____
3. obtainable _____
4. controllable _____
5. agreeable _____
6. changeable _____

7. breakable _____

8. lovable _____

9. knowledgeable _____

10. debatable _____

**Suggestions**

1. Find out if there are any restrictions on the use of studded tires in New Jersey. If there are, let the class know about them.

2. Describe to the class the way in which a tire is studded.

3. Explain the difference between a radial-ply tire and a bias-ply tire.

## Two Firsts!! (16)

Geneva Delphine Mudge (Mrs. Eva Mudge Nelson), who drove a Waverly Electric in 1898 in New York City, was the first woman automobile driver. On December 31, 1899, she participated in an automobile race in New York City, driving a locomobile which skidded on the snow and knocked five spectators down.

Jacob German, an operator of Cab No. 1565 for the Electric Vehicle Company, was the first driver arrested for speeding. He was arrested on May 20, 1899, for driving at the "breakneck speed" of 12 mph on Lexington Avenue, New York City. German was booked and jailed in the East 22nd Street stationhouse.

**Learn These Words**

*Accident* – something harmful or unlucky that happens.

*Autopsy* – medical examination of a dead body to find the cause of death.

*Fatality* – death

*Mortally* – so as to cause death

*Motorist* – a person who travels by automobile.

Henry Wells met Evelyn Thomas on May 30, 1896, and the world has never been the same. On a spring day, they came together on a street in New York City. Henry was driving his Duryea Motor Wagon and Evelyn was riding her Columbia bicycle. Suddenly there was a lot of dust, and people were shouting. Evelyn lay in the street holding her leg. Henry stared and wondered what to do. The cops later took Henry to jail.

The next day, Evelyn was in the hospital with a broken leg and Henry was released from jail. Evelyn made history; she was the first person injured in an auto accident.

On September 13, 1899, Henry H. Bliss, a 68-year-old real estate broker, stepped off a streetcar at Central Park West and 24th Street and was flattened by an automobile driven by Arthur Smith. Smith was arrested, and Bliss died at Roosevelt Hospital. His death is recorded as the first automobile fatality.

On one Sunday in 1909 in New York City, three men were killed instantly by cars, three were mortally wounded, and twenty were flung to the side of the road. Two of those killed were knocked down after dark by hit-and-run drivers, and autopsies showed that they had been run over many times by other cars while lying dead in the streets. One motorist remembered "having bumped over something" during the night.

After that, the police in New York City cracked down on motorists, making many arrests. Safer cars have since been built, and more responsible drivers have taken the wheel. But remember, it all began when Henry Wells met Evelyn Thomas.

About the Article

Match the names in Column I with the appropriate statements in Column Ii.

| | COLUMN I | | COLUMN II |
|---|---|---|---|
| A. | Evelyn Thomas | _____ | He was driving a Duryea Motor Wagon. |
| B. | Henry Wells | _____ | This was the first person injured in an auto accident. |
| C. | Henry H. Bliss | _____ | He was a 68-year old real estate broker. |
| D. | Arthur Smith | _____ | This man killed another man with his automobile. |
| | | _____ | He was the first automobile fatality. |

About Words

The suffix *ist* means *a person who*.

For example:

motorist (motor + ist) means a person who travels by automobile.

Add *ist* to the following list of words. Use each new word in a sentence.

| | Word | New Word | Sentence |
|---|---|---|---|
| 1. | tour | | |
| 2. | machine | | |
| 3. | ideal | | |
| 4. | biology | | |
| 5. | capital | | |
| 6. | social | | |
| 7. | natural | | |
| 8. | economy | | |
| 9. | real | | |
| 10. | solo | | |

**More Words for Your Notebook**

| | |
|---|---|
| insulation | lubrication |
| knock | manifold |

## An Accident (18)

"Traffic accidents are on the increase," observed an old gentleman. "It says here in the paper that in New York a man is run over every half hour."

"My, my," murmured his wife sympathetically. "Poor fellow!"

## How to Get More For Your Trade-in (19)

**Learn These Words**

*Anxious* – uneasy because of thoughts or fears of what may happen; troubled; worried, eager.

*Appearance* – outward look; what a person or thing looks like.

*Inventory* – a detailed list of articles with their estimated value.

*Mechanical* – having to do with machinery.

*Shabby* – old and worn; ragged.

*Wholesaler* – a person who sells goods in large quantities at a time.

You can get hundreds of dollars more for a car at trade-in time if you spend your time and money wisely. Getting top dollar is as much a matter of what not to touch as anything else.

The new car dealer is interested in "creampuffs" – cars that, with as little work as possible, will look almost new. If the car is more than four years old, forget it. You'll get "book price" and nothing more, because the dealer is going to sell the car to a wholesaler. A new car dealer doesn't want to bother with anything old, because the public looks to him for sharp, late model cars, not cheap transportation.

If you can't get the car in top shape for $50 to $100 less than the additional money you can get for it, don't bother. A car that needs paint, has a shabby interior, and a sick engine just isn't worth fixing.

The car's appearance, both inside and outside, is the most important feature to the dealer. If it doesn't catch a customer's eye, then there may be no chance of selling it. If the outside of the car is in good shape, then it is almost always worth some money to fix the inside. Sure, the dealer is interested in the mechanical condition of the car, but he's more interested in its appearance. So you're better off looking at things he's going to check.

When you're ready to trade, you will get a better price for the car from a dealer who sells fewer new cars. This dealer likes to have some top used cars around and doesn't want much money tied up in used car inventory. He is looking for an attractive car, and he is anxious to close a deal. So the better you prepare the car, the more likely he is to close it on terms you'll like.

**About the Article**

1. What is the most important feature of a used car in the dealer's eye? Why?

2. What is a "creampuff?"

3. What kind of car isn't worth fixing?

**About Words**

Sometimes words become habits. People have "pet" words which they use over and over again in their writing and speaking. Sooner or later these words become overworked. That is why the English language has such a large assortment of words. Words that have the same meaning or express the same idea are called *synonyms*.

Substitute a *synonym* for the word *shabby* in the following sentences:

1. His old suit looks *shabby*.

   *Synonym*_____

2. The car has a *shabby* interior.

   *Synonym*_____

3. It is *shabby* not to speak to an old friend because he is poor.

*Synonym* _____

Give two synonyms for each word:

1. appearance _____ _____

2. prepare _____ _____

3. anxious _____ _____

**Suggestion**

The article tells you what a car dealer looks for in a used car. Discuss the things you should look for when you are buying a used car from a dealer.

## The 300X (20)

**Learn These Words**

*Compartment* – a separate division or section.

*Convertible* – automobile with a folding top.

*Ignition* – system for starting the engine of a vehicle.

*Interior* – inside; inner part.

*Retractable* – able to be drawn back or in.

*Suspension* – the arrangement of springs for supporting the body of a seat, chair, vehicle, etc.

In 1966, Chrysler introduced a smart looking, sleekly designed two-door convertible. The "300X" was really not new in appearance. The most important changes were inside the car. Some of the new features were a retractable,stowable, and adjustable steering unit; seats with rubber suspensions and adjustable air cells; keypunch car operation of door locks, ignition, and radio; and two TV sets – one for the passengers and the other to let the driver know about the traffic in back of him.

If you pushed one button, a tape-recorded voice gave the exact time. Push another button and the ashtrays were emptied into a rear compartment. The builders of the car must have had a wild imagination. They were certainly far ahead of their time.

The car had folding headlights that disappeared behind the grille when not in use. The doors were opened electrically, and there were no exterior handles. It had four bucket seats with armrests and seat belts which were hidden when not in use.

Information on the car's speed, temperature, oil pressure, and gas was flashed on a small screen in front of the driver. Pushbutton controls for the lights, turn signals, windshield wipers, and door locks were built in the steering unit. The car's radio was also turned on and off with punch cards.

The Chrysler 300X was used only as a show car. But Chrysler did want to test these new interior features and see how people would react to them.

### About the Article

1. What were some of the important changes made inside the "300X"?

2. Why does the author say that the builders of this car must have had a wild imagination?

### About Words

If *interior* means "the inside," what word in this article means the opposite? You're right if you said *exterior*. These two words are *antonyms* – words that are opposite in meaning.

Underline the antonyms in each line:

1. old, worn-out, modern, unique, new.

2. employed, subtracted, multiplied, fired, loaned.

3. control, tell, confess, deny, crime.

4. complete, total, unfinished, lone, flatter.

5. unlike, simple, unusual, common, clear.

### More Words For Your Notebook

| | | |
|---|---|---|
| muffler | shimmy | timing |
| petcock | throttle | |

**Suggestions**

1. Are any of the fantastic features of the "300X" now standard equipment in today's Plymouths or Chryslers? Discuss further the possibility of future use of these features in the automobile industry.

2. Build the car of your choice! Before any car goes to the assembly line, it must have a design. Here's your chance. Using words first, describe the car of your own design. Include any instruments and gadgets that you want. Later, make a sketch of your car, if you like.

## A Fender Bender (21)

"Goodness!" gasped the passenger to the reckless motorist. "You just missed that pedestrian back there!"

"Can't be helped," grunted the driver as he neatly took a fender off a parked car; "I don't have time today to go back and try again."

## Lonely

In driving only one block, the sweet young thing had violated six traffic ordinances. "Well, Miss," said the cop who stopped her, "I suppose you know why I halted you?"

"Oh, don't tell me; let me guess," she replied. "I know! You're lonely!"

## A Bit of the Past (22)

**Learn These Words**

*Advertisement* – a public notice or announcement.

*Cruise* – move along smoothly at a steady speed.

*Cylinder* – the piston chamber of an engine.

*Electroplated* – covered with a coating of metal by means of electrolysis.

*Lack* – not enough; need.

*Luxury* – comforts and beauties of life beyond what is really necessary.

*Pigment* – coloring matter.

*Preassembled* – already put together.

*Replica* – a copy; model.

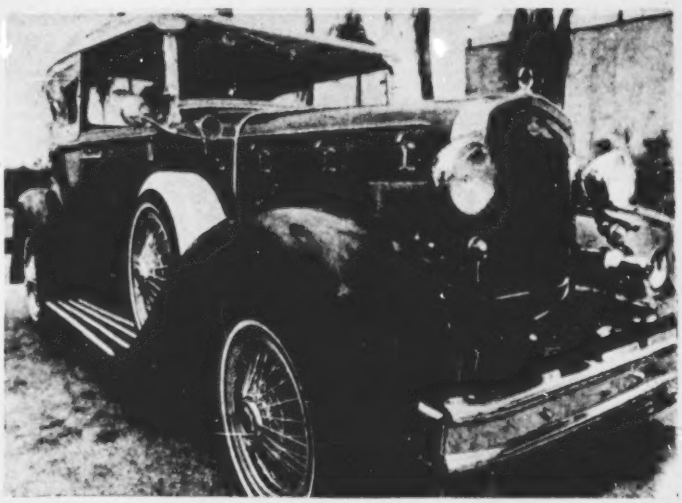
The magazine advertisement read, "The Classic Model A, your chance to grab a piece of the Twenties and Thirties."

In America in 1931, a new Phaeton could be bought for under $500, a lot of money for most people during the time of the Depression. But it was a devil of a car and would soon become a collector's item.

The Phaeton was a slow car by today's standards. It was powered by a 4-cylinder engine. It had one outstanding feature, however, that the cars of today often lack – it had class.

In 1961, Jack Faircloth got an idea. He decided to turn his love for classic cars into a moneymaking business. He began by writing to the Ford Motor Company to get the building rights on the car. They gave him the go-ahead. He spent three years searching for a 1931 Phaeton and finally located a rusted-out body for $3,000. The first model was ready after 10 months of work and $156,000 in expenses. The first replica rolled off the assembly line in December 1965, and was immediately sold.

The Phaeton replica was a quality build automobile. The fenders were stronger than steel, and the windshield posts were chrome plated brass. The paint pigment cost $5.20 a pound. The chrome on the bumpers was electroplated onto the metal so that it would not peel off if the bumper was scratched or hit. The door hinges were stronger than necessary, and the brakes were made for cars weighing twice as much as the Phaeton. The fiberglass body did not rust, rattle, or leak.



The factory produced five cars a week, attaching the two-piece bodies to specially built frames, and using a Ford 302-cubic-inch V8 engine, and other Ford preassembled parts.

This Phaeton was surely a luxury item for those with money to spend on a beautiful toy. It was designed for around-town driving, but it could cruise at 70 mph. A four-seater and a two-seater with rumble seat were available at a basic price of $6,995; automatic transmission was $300 extra. There were 41 colors to choose from.

Six hundred were sold, mostly to millionaires. Among the customers were Hubert Humphrey, Liberace, and many others.

**About the Article**

1. What did the Phaeton have that the cars of today often lack, according to this article?

2. How did Faircloth develop his idea?

3. What made the Phaeton replica a quality built automobile?

**About Words**

There are many words that sound alike but are spelled differently and have different meanings. These words are called *homonyms*. One of the words introduced to you at the beginning of this article is the word *cruise*. Its *homonym* is the word *crews*. Look at the following sentences:

1. It can *cruise* at 70 mph.

2. The train's *crews* enabled the railroads to maintain a schedule.

Here are some pairs of words that sound alike – homonyms. Find out the meaning of each word and use each correctly in a sentence.

| | Meaning | Sentence Use |
|---|---|---|
| 1. | coarse<br>course | |
| 2. | weather<br>whether | |
| 3. | soar<br>sore | |
| 4. | fourth<br>forth | |

## Hey, Dummy, Your Oil's Low! (23)

**Learn These Words**

*Booster* – a device for controlling or varying a force in electricity.

*Console* – a frame containing keys, pedals, buttons, or the like.

*Coolant* – a cooling chemical, liquid, gas, etc. used for machines or motors.

*Current* – now being used; of the present time.

*Electrolyte* – liquid found in an automobile battery.

*Gimmick* – any small device, especially one used secretly or in a tricky manner.

*Monitor* – keep an eye on; watch; give warning.

*Reservoir* – place where water is collected and stored for use.

*System* – set of things or parts forming a whole.

"This is your Toyota speaking," says a voice coming over the radio speaker, interrupting your favorite FM program. "Your oil is one quart low! Add a quart of quality oil. Remember, if you're good to your Toyota, your Toyota will be good to you."

Sounds like some science fiction gimmick of the future, doesn't it? Well, it almost happened in 1974. The Toyota manufacturers have added a series of 11 warning lights, built into a ceiling console. These lights monitor front disc brake wear, vacuum, booster performance, brake fluid, radiator coolant, battery, electrolyte, and even the windshield washer reservoir, as well as telling you if a headlight, brakelight, or license plate light goes out.

When something is about to go wrong, a flashing red warning light near the rearview mirror attracts the driver's attention. This system, known as ESP (Electro Sensing Panel), may soon replace the current "idiot light" system.

For example, the ESP panel tells when the brake fluid is getting low. The brakes are still working, but they need attention. Likewise, the ESP oil light tells you when the engine is one quart down, but while there's still oil pressure. And the ESP coolant light tells you when the radiator is running low, but before it overheats. They should have called it an Early Warning System. Now here's a safety system that makes sense.

**About the Article**

1. What does this article mean by the initials ESP?

2. Why should Toyota have called this system the Early Warning System?

3. What are some of the items that this system monitors?

**About Words**

Here are some more homonyms. Find the meaning of each and use each correctly in a sentence.

| | | Meaning | Sentence Use |
|---|---|---|---|
| 1. | current | | |
| | currant | | |
| 2. | idol | | |
| | idle | | |
| 3. | cereal | | |
| | serial | | |
| 4. | root | | |
| | route | | |

How many homonyms can you think of? Make a list of them and compare with other members of the class.

**Something to Think About!**

1. What else do the initials, ESP stand for? In what way is that meaning similar to the Toyota ESP system?

2. What is meant by the "idiot light" system? How is it different from the ESP system in the article?

**More Words For Your Notebook**

| | | |
|---|---|---|
| speedometer | thermostat | rotor |
| tachometer | vacuum | |

## Skimming For Facts

Before reading the following article, skim through it quickly and locate the following information. Write the answers, then read the entire article.

1. The name of a very successful three-wheeler built and sold in England.

   _____

2. The name of the magazine that called it "the Mustang of its class."

   _____

3. People who scoot around on three-wheelers. _____

4. The world's first car. _____

5. Another name for a three-wheeler. _____

6. An auto manufacturer. _____

7. Paul Lewis invented it in 1937. _____

8. The year in which Glen Davis invented his car. _____

9. What an 18-year old could buy in England for $500 down. _____

10. How the Bug kept up with normal traffic. _____

## Is There a Three-Wheeler in Your Future? (24)

**Learn These Words**

*Commuter* – a person who travels back and forth from his home to his work.

*Economical* – saving, thrifty, avoiding waste.

*Maneuver* – handle; move skillfully or by a clever trick.

*Performance* – how a person or thing does something.

*Predicted* – told about something before it happened.

*Successful* – having a lot of good fortune; prosperous.

*Trikes* – three-wheelers.

*Unstable* – easily moved or shaken; not firmly fixed.

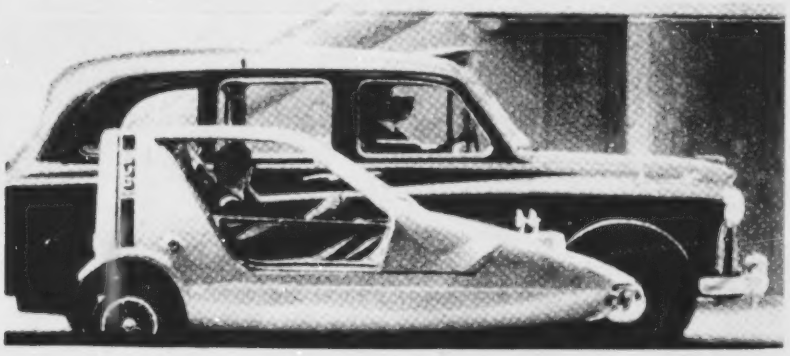
*Warranty* – promise; pledge; guarantee.

In 1971, a very successful three-wheeler was being built and sold in England. It was the Bond Bug, a car which the magazine *Autocar* predicted would become "the Mustang of its class." It was cute, sporty, and economical, and it caught the eye of England's young drivers.

Most people think of three-wheelers as unstable, far-out, and tricky, but they're not. You see more of them around than you realize. Golfers and some postmen scoot around on three-wheeled electrics. Three wheels can never equal four, but they're coming closer. The world's first car, the Cugnot Steam Tractor of 1769, was a three-wheeler. Since then plenty of trikes have come along but few have stayed.

What's good about them? Well, three-wheelers are easier and less expensive to build and easier to streamline. They turn and maneuver more sharply.

This country has never had much use for three-wheelers. General Motors and other major automakers are working on small commuter cars which have only three wheels. In the past, several inventors tried to produce three-wheelers – among them were Paul Lewis in 1937 with the "Airomobile" and Glen Davis in 1948 with the "Davis."



However, let's go back to England. The Bug was legally driven by anyone with a motorcycle license, which means 16-year-olds. At 18, the young driver in England could have bought a Bug Budget Package for $500 down. This got him the car, insurance, license, and warranty for two years.

Was it safe? Yes, but you had to be careful not to push it too far. Its performance let the Bug keep up with normal traffic. Whether it can catch on or not in America remains to be seen. It would be great for housewives, commuters, and others who make short trips. Yes, there could be a three-wheeler in your future.

**About the Article**

1. What are some good features of three-wheelers?

2. Who would benefit from the three-wheelers in America? Explain your answer.

3. What was the Bug Budget Package?

4. How might the three-wheeler be economical?

**About Words**

*Un* is another common prefix. It means"not" or "the opposite of". Look at the following words and decide the correct meaning of *un*:

1. A little baby is *unable* to walk or talk. _____

2. That face is *unfamiliar* to me. _____

3. *Unlock* the safe. _____

4. A book that is *unread* should be placed at the front of the shelf. _____

_____

5. *Untie* the rope and let the animal loose. _____

**Add These Words to your List:**

| | | |
|---|---|---|
| framework | generator | idle |
| friction | governor | |

**On Your Own**

Find information on the following three automobiles and their inventors.

1. The airomobile invented by Paul Lewis.

2. The Davis invented by Glen Davis.

3. The Cugnot Steam Tractor.

**Learn These Words**

*Choke* – a valve that cuts off the supply of air in a gasoline engine.

*Racy* – vigorous; lively.

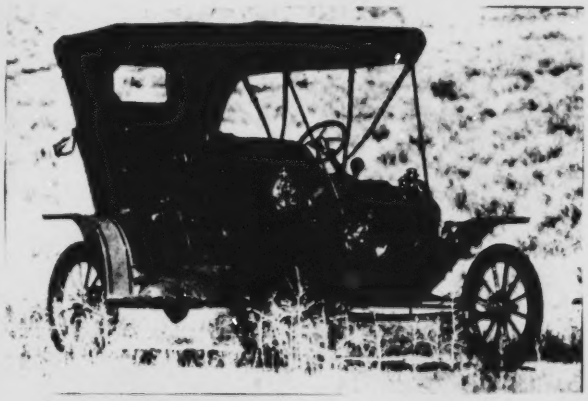
*Radiator* – device for cooling circulating water.

*Roadster* – an open automobile with one seat.

*Rugged* – rough; strong; sturdy.

*Sedan* – a closed automobile seating four or more persons.

Since you are under 40, you probably don't have any idea what Henry Ford's Model T did for America. The "T" may just seem like a freak: a black tinny car that the old people took out for parades on the Fourth of July. After a few beers they would talk with excitement about the "Tin Lizzie." Why do they keep that noisy piece of junk around?



Between 1909 and 1927, Henry Ford built 15 million Model T's. It wasn't Ford's first car, but for 14 years after 1909 it was at the top of the sales charts. In 1909, the automobile was a rich man's toy. The average cost of a car was over $2100, and the average worker earned only $10 to $15 a week. Instead of raising prices each year, Ford managed to lower Model T prices. The touring car started at $950 in 1909, slipped to $525 by 1918, and was down to $380 in 1926.

Today we think that every Model T ever built looked the same. Actually, there were body types ranging from the open roadsters to "Tudor" and "Fordor" sedans. There were still brass radiators and red paint in 1909, and it wasn't until 1914 that the customer was allowed "any color you want as long as it's black." In 1925, the nickelplated radiators and racy two-tone paint jobs were offered. The most important feature of the Model T was its simple design. The engine was 176.7 cubic inches and about 20 horsepower. It was rugged since most everything was made of cast iron.

Driving the Model T was supposed to be as simple as the car itself. It was, once you got the car started. Starting the motor was a problem. Tickle the carburetor, hold the choke wire at exactly the right spot. Take a long breath and hold it – this was supposed to protect you in case of backfire. Then give a sudden yank on the starting crank. This had to be done just so. It wasn't a pull or a push – it was rather a flip or a flirt. You had to take the engine by surprise and then step back out of reach.

By 1926, the Model T's time was up. It had served its purpose, putting Americans on the road just as the Renault 4CV did in France and the Morris Minor in England. Model T's became scrap and sold for $5 apiece. One popular song moaned, "Poor Lizzie . . . What'll become of you now?"

Today there are about 200,000 Model T's left, and they are priced a lot higher than $5!

**Fact Finding – Fill in the blanks**

1. Between 1909 and 1927 Henry Ford built _____ million Model T's.
2. In the year _____, the automobile was a rich man's car.
3. In 1909, the average cost of a car was over _____.
4. The touring car was priced at _____ in 1909.
5. The engine was a side-valve with _____ cubic inches.
6. The engine also had about _____ horsepower.
7. By _____, the Model T's time was up.
8. The _____ _____ was a popular French car at that time.
9. And the _____ _____ was the popular English car.
10. Today there are about _____ Model T's left.

**About Words**

Every dictionary has two words printed at the top of each page. These are called guide words. All the words on that page fall alphabetically between the two guide words.

Which words in the following list would appear on the page with these two guide words:

| **flop** | **flower** |
|---|---|
| floral | flounce |
| flow | flood |
| float | fluff |
| fluid | floor |
| flour | florist |
| flourish | flock |

**Words Paint A Picture**

1. In the first paragraph, the author begins to talk about Ford's Model "T". What are some of the words or phrases that the author uses to describe the car?

2. The roadster and the sedan were two types of car bodies manufactured during the early years of the automobile. The sedan is still a popular body type today. List some other body types of today's cars.

**Learn These Words**

*Announcement* – a public or formal notice.

*Asserts* – declares, insists.

*Competition* – contest; effort to obtain something wanted by others.

*Conference* – a meeting of interested persons to discuss a particular subject.

At a Ford of England press conference, originally planned to celebrate Jackie Stewart's third World Championship and his 100th Grand Prix event, he made the announcement of his retirement. Stewart had never started his 100th race; his car had been withdrawn from the United States Grand Prix following the death of his close friend and teammate, Francois Cevert, while practicing for that race. Cevert's death really upset Stewart as he spoke of his retirement. He said, "Really, today I'm very happy indeed. I wouldn't change anything that's happened, with one or two exceptions –– especially Francois. I know you all understand how I feel about him and I don't want to

say anymore . . . From today on, I'm no longer a racing driver."

Stewart went on to say that he had actually made his decision on April 5, 1973, and apologized for not discussing the subject all year. He said that he couldn't announce it until now because of his wife and two sons – he didn't want them to suffer the countdown through his last season.

Stewart asserted that his retirement from racing would be complete: "No more driving, testing, or anything. I will stay away from all forms of competition motoring."

So at age 34, the most successful F/1 driver of all time quit, which also ranks him as one of the most intelligent. The only record he did not hold at the time of his retirement was the total number of World Driving Championships. Juan Fangio still holds that record with five titles. Like Fangio, Stewart decided to retire in top form, even though still capable of winning for some time to come.

About the Article

1. What announcement did Jackie Stewart make at the press conference?

2. Who was Francois Cevert?

3. Why does the author refer to Stewart as one of the most intelligent racing drivers?

4. Why did Stewart quit racing competition?

About Words

In previous lessons you learned about synonyms, antonyms, and homonyms. Tell whether the following pairs of words are synonyms, antonyms, or homonyms.

1. famous – unknown _____

2. son – sun _____

3. happy – sad _____

4. victory – win _____

5. through – threw _____

6. last – final _____

7. top – bottom _____

8. some – sum _____

9. complete – total _____

10. one – won _____

**On Your Own**

In this article you've been introduced to a very famous racing driver – Jackie Stewart. This article only tells you about Stewart's retirement, but what about his entire career? Where and when did Stewart get his start in racing? How long did he race? Why did he choose racing as a career? What championships did he win? Did he ever have any tragic accidents?

These questions should have aroused your curiosity. Write a short report about Jackie Stewart. Include the answers to those questions and add any information that you feel is important or interesting.

## Ford's Pantera (27)

**Learn These Words**

*Emission* – thing that is sent out or discharged.

*Exemption* – release from a particular duty, rule, etc.

*Luxurious* – very comfortable and beautiful.

*Reliable* – that which can be trusted or depended on.

The first thing you've got to understand about the Pantera is why we called it a "dream car." It wasn't one of those models with fancy body work and standard running gear that were called dream cars back in the '50's. The Pantera had very thorough engineering behind it, as well as styling.

But it was just the kind of car you dream about – a car you might never buy, but a car you would just love to drive and drive. It had an emission-controlled Ford "Cleveland" V-8 engine and all required safety features.

The Pantera was a product of DeTomaso in Madena, Italy. Alejandro DeTomaso came to Italy from Argentina back in the '50's and became a racing driver. Later he started to build cars and joined Ford in 1970. He put a lot of his racing experiences into this car.

The Pantera was a car for tough drivers. Power steering was not available, so if you wanted to use its muscles, you had to have some of your own, plus a cool head.

In short, the Pantera was the nearest thing to an all-out racing car that you could legally drive on the highway. If you had the skill and the nerve, you could drive it like a real racer, steering as much with your foot as with your hands. The car responded beautifully to full acceleration out of a turn.

On the road, the Pantera was comfortable and luxurious. It was an easy car to fall in love with. A few lucky buyers did just that. You may see one of them on the road someday.

**About the Article**

1. How was the Pantera different from the "dream cars" of the 1950's?

2. Who was Alejandro DeTomaso, and what was his background?

**About Words**

The suffix *-er* means "person or thing that" when added to a verb. For example:

**lender** (lend + er) means "person who lends".

Add *-er* to the following words and give the definition for each:

1. drive
2. buy
3. race
4. complain
5. think
6. move

Another common suffix is *-less*, which means "without", "that does not," "that cannot be." Add *-less* to the following words and give their definitions.

1. home
2. count
3. dream
4. blame
5. cease
6. hope

**On Your Own**

In the previous article you were asked to write a report on a person – Jackie Stewart. Now you are asked to write a report on a car. This article leaves out a lot of information that a prospective buyer might want to know.

Write a report on the Pantera or another car that might be considered different from an ordinary car. Try to find as much information as you can.

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